ASSEMBLY BILL No. 289

Introduced by Assembly Member Chan

February 9, 2005

An act to add Section 57013 to the Health and Safety Code, relating to hazardous chemicals.

LEGISLATIVE COUNSEL'S DIGEST

AB 289, as introduced, Chan. Hazardous chemicals: testing methods

Existing law required the California Environmental Protection Agency to initiate a scientific peer review of screening levels for certain contaminants and to complete the process by December 31, 2004. The agency was required to publish, by March 1, 2004, a list of screening numbers determined for specified contaminants, and to conduct public workshops in establishing and revising those levels.

This bill would require each manufacturer of a high production volume chemical or a reportable chemical, as defined, for each high production volume chemical and reportable chemical imported into, or offered for sale in, this state by the manufacturer, to provide the agency with test methods, including chemical biomarkers of exposure, the octanol water partition coefficient, and the bioconcentration factor, for that chemical.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: no.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares all of the following:

(a) Every year more than 75,000,000 pounds of all chemicals are released in the state.

(b) Over 85,000 chemicals are in commercial use today, and many are now known to cause cancer and damage to the brain and the nervous and reproductive systems.

(c) Many of these chemicals do not persist, but instead break down in the environment or are metabolized by humans or biota into different, more stable compounds, which can be used as chemical indicators or biomarkers of exposure to the parent compound.

(d) For a majority of chemicals in use today, the matrix by which the chemical is transported into biota and humans is unknown and it is impossible to determine the chemical's level in humans. Analytical methods only exist for approximately 30 percent of all chemicals.

(e) It costs the federal government and state governments time and money to develop test methods for chemicals or their chemical biomarkers of exposure. It is conservatively estimated that developing test methods for each chemical costs over one hundred thousand dollars ($100,000).

(f) In the interests of human health, it should be the responsibility of those who manufacture a chemical to produce test methods to determine the matrices by which that chemical is transported into humans and biota, and to determine which of the breakdown products or metabolites of the chemical are best suited to be used as chemical biomarkers of exposure.

SEC. 2. Section 57013 is added to the Health and Safety Code, to read:

57013. (a) For purposes of this section, the following definitions shall apply:

(1) "Bioconcentration factor" means the concentration of a chemical in an organism divided by its concentration in a test solution or environment.

(2) "Chemical" has the same meaning as a chemical substance, as defined in Section 2602 of Title 15 of the United States Code.

(3) "Chemical biomarker of exposure" means a chemical that is derived from the parent compound, either as an environmental breakdown product or biological metabolite in humans or biota, that is stable and that can be used as a surrogate for the presence and levels of the parent compound. A chemical biomarker of

exposure may be used as a qualitative and quantitative measure of exposure to the parent compound.

(4) "High production volume chemical" means a chemical that is manufactured in, or imported into, the United States in an amount equal to, or greater than, 1,000,000 pounds per year.

(5) "Manufacturer" means any person who produces a high production volume chemical or a reportable chemical in this state or who imports a high production volume chemical or a reportable chemical into the state, for sale in this state.

(6) "Matrix" means water, air, soil, sediment, sludge, chemical waste, fish, blood, adipose tissue, urine, and breast milk.

(7) "Octanol-water partition coefficient" means the ratio of the concentration of a chemical in octanol and in water at equilibrium and at a specified temperature.

(8) "Reportable chemical" means a chemical that is subject to the reporting requirements of Subpart B (commencing with Section 710.23) of Part 710 of Subchapter R of Chapter 1 of Title 40 of the Code of Federal Regulations, adopted pursuant to the Toxic Substances Control Act (15 U.S.C. Sec. 2601 and following).

(9) "Test method" means a procedure used to sample, prepare, and analyze a specific matrix to determine the identity and concentration of a specified chemical and its chemical biomarker of exposure. A test method shall conform to the standards adopted by the National Environmental Laboratory Accreditation Conference.

(b) Each manufacturer of a high production volume chemical or a reportable chemical shall provide the agency, for each high production volume chemical and each reportable chemical imported into, or offered for sale, in this state by the manufacturer, with all of the following:

(1) Test methods, including chemical biomarkers of exposure, for that chemical.

(2) The octanol-water partition coefficient for that chemical.

(3) The bioconcentration factor for that chemical.

O